

MR3029-76

Appl. No. 10/602,866

Reply to Final Office action of September 27, 2004

**Amendments to the Claims**

This listing of claims will replace all prior version, and listings of claims in the application.

**Listing of Claims:**

Claims 1-14 (cancelled).

Claim 15 (previously presented) A method for forming a binary liquid crystal mixture with V-shaped switching electro-optic response, said method comprising:

providing an achiral swallow-tailed compound; and

doping a liquid crystal material with said achiral swallow-tailed compound to generate a binary liquid crystal mixture, wherein said binary liquid crystal mixture with a phase and displaying a V-shaped switching electro-optic response in said phase.

Claim 16 (previously presented) The method according to Claim 15, wherein said achiral swallow-tailed compound is 2-propylpentyl-4-(4'-decyloxybiphenyl-4-carboxyloxy)benzoate.

Claim 17 (previously presented) The method according to Claim 15, wherein said achiral swallow-tailed compound is 2-propylpentyl 4-(4'-nonyloxybiphenyl-4-carboxyloxy)benzoate.

Claim 18 (previously presented) The method according to Claim 15, wherein said liquid crystal material is a ferroelectric liquid crystal

MR3029-76  
Appl. No.10/602,866  
Reply to Final Office action of September 27, 2004

material.

Claim 19 (previously presented) The method according to Claim 18, wherein said ferroelectric liquid crystal material is 1-ethylpropyl (S)-2-[2-fluoro-4- (4'-decyloxybiphenylcarbonyloxybenzoyl)propanoate.

Claim 20 (previously presented) The method according to Claim 15, wherein said liquid crystal material is an antiferroelectric liquid crystal material.

Claim 21 (previously presented) The method according to Claim 20, wherein said antiferroelectric liquid crystal material is (S)-4-(1-methylheptyloxy)carbonylphenyl 4'-octyloxy-4-biphenylcarboxylate.

Claim 22 (previously presented) The method according to Claim 15, wherein said binary liquid crystal mixture is a binary ferroelectric liquid crystal mixture.

Claim 23 (previously presented) The method according to Claim 15, wherein said binary liquid crystal mixture is a binary antiferroelectric liquid crystal mixture.

Claim 24 (previously presented) The method according to Claim 15, wherein said phase is a ferroelectric phase.

Claim 25 (previously presented) The method according to Claim 15, wherein said phase is an antiferroelectric phase.